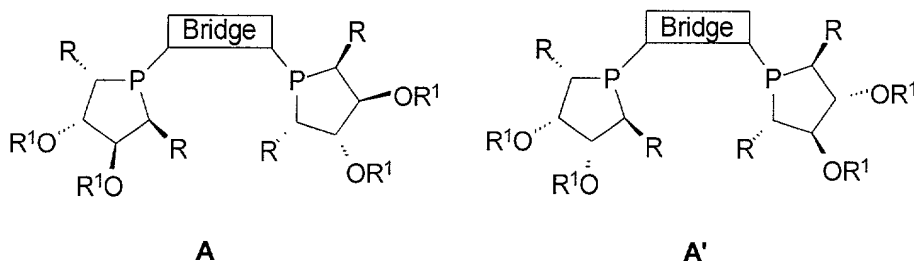


WHAT IS CLAIMED IS:

1. A compound of formula A, A', C and C', or the corresponding enantiomer:



wherein:

- a) R and R² are independently aryl, alkyl, alkyl aryl, aryl alkyl, or chiral oxazolino which may be substituted with carboxylic acid, alkoxy, hydroxy, alkylthio, thiol, dialkylamino, or diphenylphosphino groups;
- b) R¹ can be H, alkyl, silane, aryl, a water soluble unit, or a linked polymer chain or inorganic support; and

c) Bridge may be:

-(CH₂)_n- where n is an integer ranging from 1 to 8;

$-(CH_2)_nX(CH_2)_m-$ wherein n and m are each integers, the same or different, ranging from 1 to 8, and X is O, S, NR^4 , PR^4 , AsR^4 , SbR^4 , divalent aryl, divalent fused aryl, divalent 5-membered ring heterocyclic group, or divalent fused heterocyclic group, wherein R^4 is aryl, alkyl, substituted aryl, or substituted alkyl; or 1,2-divalent phenyl, 2,2'-divalent 1,1'-biphenyl or 2,2'-divalent 1,2'-binaphthyl or ferrocene, each of which may be substituted with aryl, C1-C8 alkyl, F, Cl, Br, I, $COOR^5$, SO_3R^5 , $PO_3R^5_2$, OR^5 , SR^5 , NR^5_2 , PR^5_2 , AsR^5_2 , or SbR^5_2 ;

wherein the substitution on 1,2-divalent phenyl, the ferrocene or biaryl bridge can be independently halogen, alkyl, alkoxy, aryl, aryloxy, nitro, amino, vinyl, substituted vinyl, alkynyl, or sulfonic acids; and

R⁵ is hydrogen, C1-C8 alkyl, C1-C8 fluoroalkyl, or C1-C8 perfluoroalkyl, aryl; substituted aryl; arylalkyl; ring-substituted arylalkyl; or –
CR³₂(CR³₂)_qX(CR³₂)_pR¹ wherein q and p are integers, the same or different, ranging from 1 to 8; R³ is aryl, alkyl, substituted aryl, or substituted alkyl; and X is as defined above.

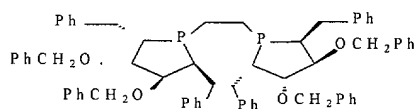
2. A compound according to claim 1, wherein the compound is of formula A or A', or the corresponding enantiomer.

3. A compound according to claim 2, wherein the compound is of formula A or A', or the corresponding enantiomer, wherein R is methyl, ethyl, or benzyl; R' is hydrogen or benzyl; and Bridge is:

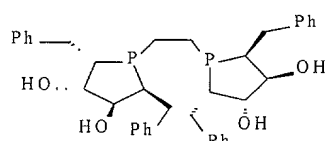
-(CH₂)_n- where n is an integer ranging from 1 to 3;

1,2-divalent phenyl, 2,2'-divalent 1,1'-biphenyl, 2,2'-divalent 1,2'-binaphthyl, or ferrocene, each of which may be substituted with alkyl having 1-3 carbon atoms or OR⁵, wherein R⁵ is methyl or ethyl.

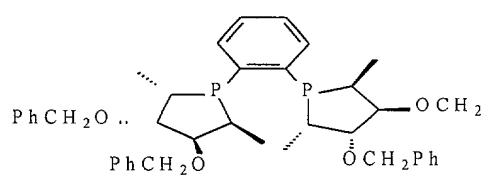
4. A compound according to claim 3, selected from L1, L3-L5, L7-L8, L10-L12, and L18-L21:



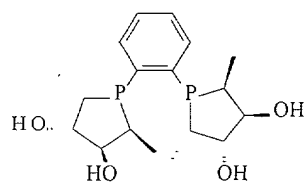
L 1 (A)



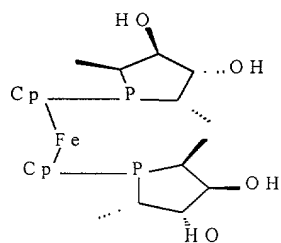
L 3 (A)



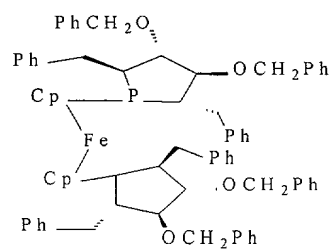
L 4 (A)



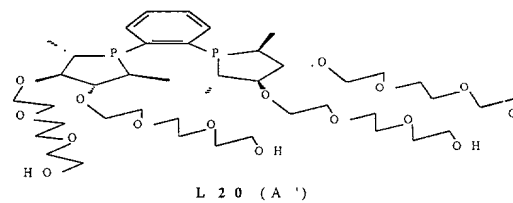
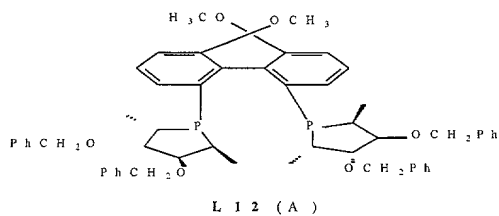
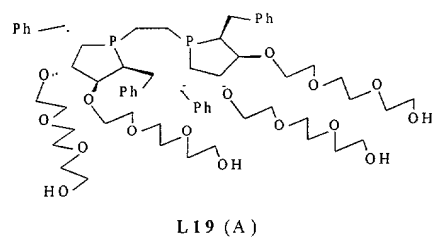
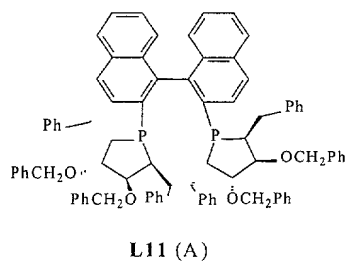
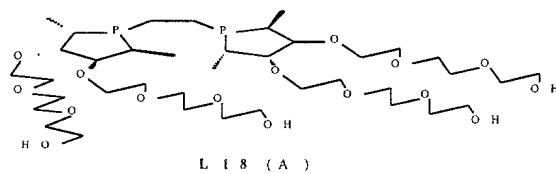
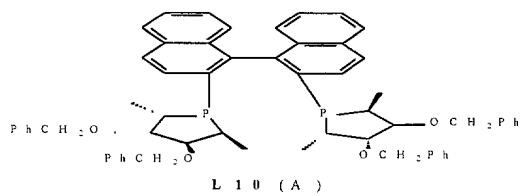
L 5 (A)



L 7 (A)



L 8 (A')





- [illegible]



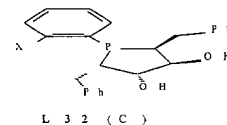
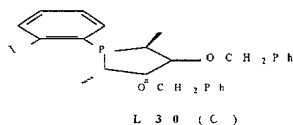
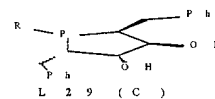
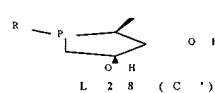
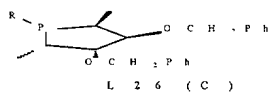
- [illegible]



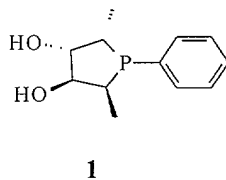
- Abstract**—The purpose of this study was to determine whether there were differences in the prevalence of musculoskeletal disorders among different types of workers. The subjects included all employees of a large manufacturing company who had been employed at least one year. A questionnaire was sent to each employee asking about symptoms of musculoskeletal disorders and work-related factors. The results showed that the prevalence of musculoskeletal disorders was higher among non-manual than manual workers. This result was confirmed by logistic regression analysis. The prevalence of musculoskeletal disorders was also higher among those working in the production department than among those working in other departments. These findings suggest that the prevalence of musculoskeletal disorders is related to both job type and work environment.

- [illegible]

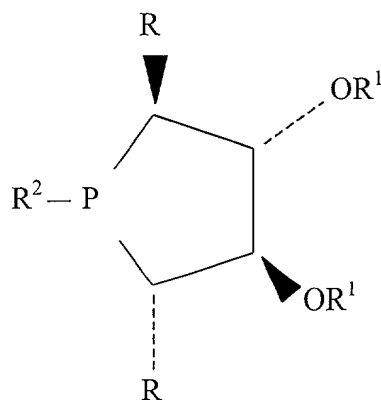
9. A compound, according to claim 1, which is selected from structures L26, L28, L29, L30 and L32, represented by the formulas:



10. A compound according to claim 1, represented by the formula (1):



11. A compound of the following formula or its corresponding enantiomer:



wherein:

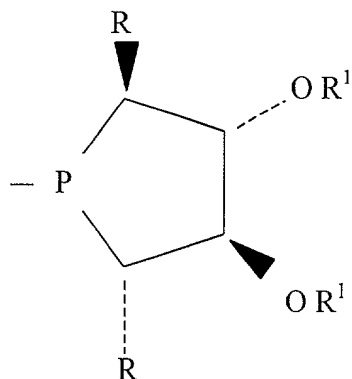
- A) R is each C₁-C₈ alkyl, C₁-C₈ alkyl aryl; aryl C₁-C₈ alkyl, aryl, each of which may be substituted with carboxylic acid, alkoxy, hydroxy, C₁-C₈ alkylthio, thiol, dialkylamino, or diphenylphosphino, or chiral oxazoline; and
- B) R¹ is each H, C₁-C₈ alkyl, silane, aryl, a water soluble unit, or a linked polymer chain or linked inorganic support; and
- C) R² is either R, H, or a symmetrical bidentate structure having the formula



wherein $\boxed{\text{BRIDGE}}$ is

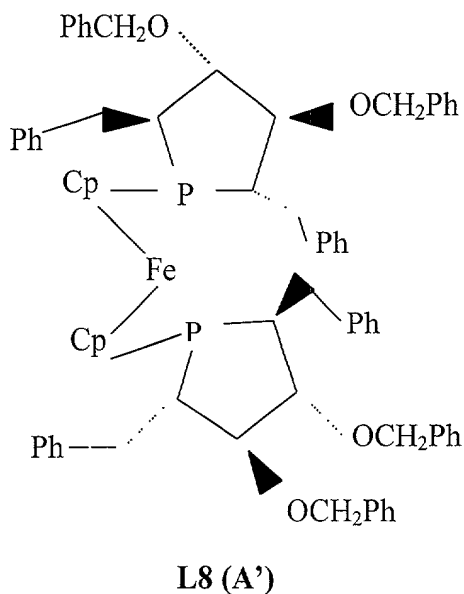
- i) $-(\text{CH}_2)_n-$ where n is an integer from 1 to 8; or
- ii) $-(\text{CH}_2)_n \text{X} (\text{CH}_2)_m-$ where n and m are the same or different integers from 1 to 8, and X is O, S, NR⁴, PR⁴, AsR⁴, SbR⁴, divalent aryl, divalent fused aryl, divalent 5-membered heterocyclic ring, or divalent fused heterocyclic ring, where R⁴ is C¹-C⁸ alkyl, aryl, substituted aryl, or substituted C₁-C₈ alkyl; or
- iii) 1, 2-divalent phenyl, 2, 2'-divalent 1, 1'-biphenyl, 2,2'-divalent, 1,1' binaphthyl, or ferrocene, each of which may be substituted independently with C₁ - C₈ alkyl or aryl, F, Cl, Br, I, COOR⁵, SO₃R⁵, PO₃R⁵₂, OR⁵, SR⁵, NR⁵₂, PR⁵₂, AsR⁵₂, SbR⁵₂, nitro, vinyl, substituted vinyl, alkynyl wherein R⁵ is H, C₁-C₈ alkyl, substituted C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ perfluoroalkyl, aryl or substituted aryl; and

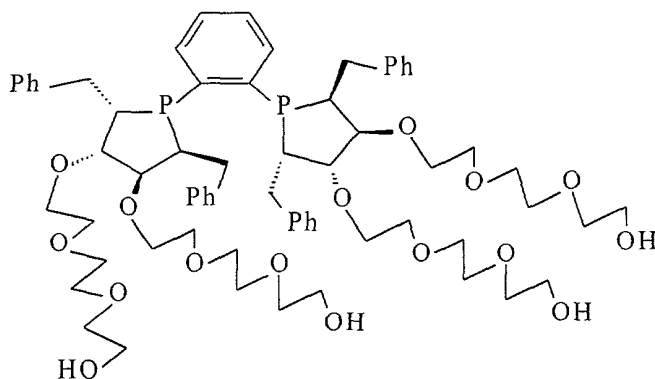
wherein Z is a compound selected from the group of compounds having the following formula and their corresponding enantiomers:



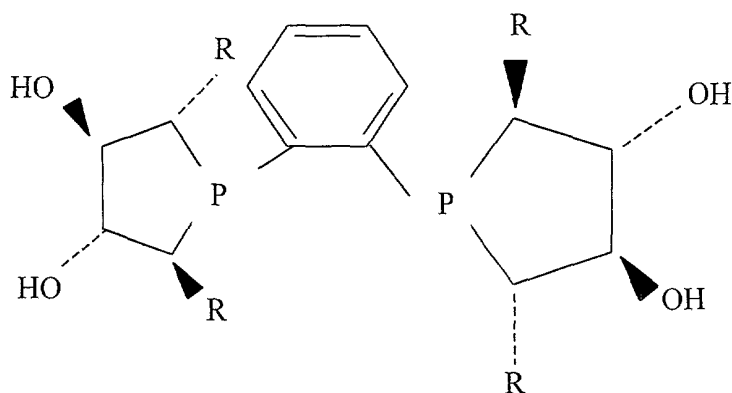
12. A compound according to claim 11 wherein R is methyl, ethyl, or benzyl; R¹ is hydrogen or benzyl, and BRIDGE is:
 $-(CH_2)_n-$ where n is an integer from 1 to 3; 1,2- divalent phenyl, 2,2' divalent 1,1' biphenyl, 2,2'-divalent 1,2' binaphthyl, or ferrocene, each of which may substituted with C₁-C₃ alkyl or OR⁵, wherein R⁵ is methyl or ethyl.

13. A compound according to claim 11 selected from the group of compounds of the following formulas and their corresponding enantiomers:

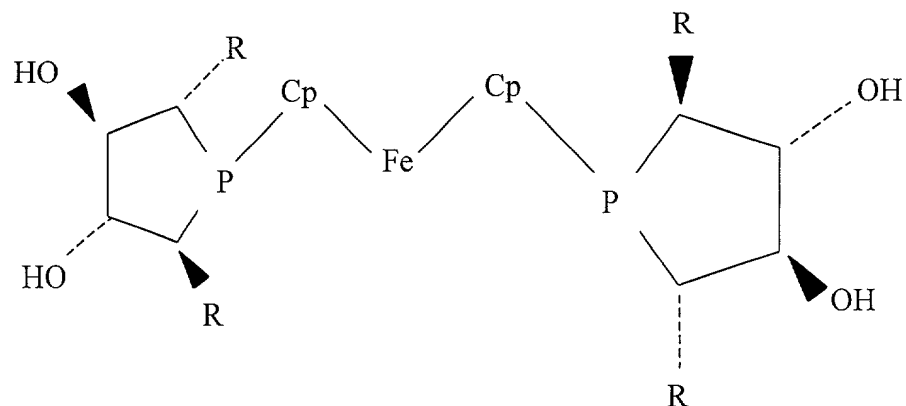


**L21 (A)**

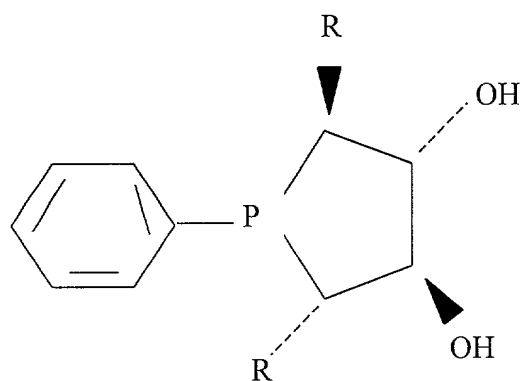
14. A compound according to claim 11 selected from the group of compounds of the following formulas and their corresponding enantiomers wherein R is either methyl or ethyl:



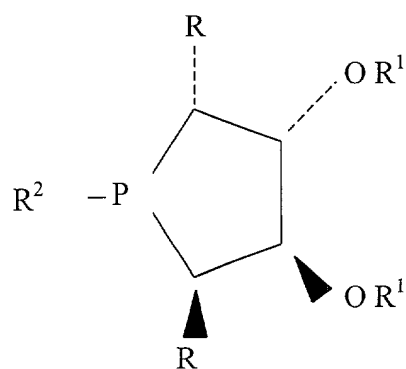
15. A compound according to claim 11 selected from the group of compounds of the following formulas and their corresponding enantiomers wherein R is either methyl or ethyl:



16. A compound according to claim 11 selected from the group of compounds of the following formula and their corresponding enantiomers:



17. A compound selected from the group of compounds of the following formula:



wherein

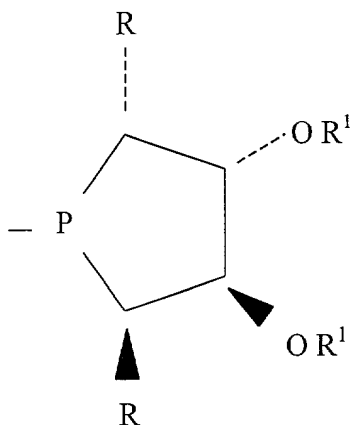
- A) R is C₁-C₈ alkyl, C₁-C₈ alkyl aryl, aryl C₁-C₈ alkyl, or aryl, each of which may be substituted with carboxylic acid, alkoxy, hydroxy, alkylthio, thiol, dialkylamino, diphenylphosphino or chiral oxazoline; and
- B) R¹ is H, C₁-C₈ alkyl, silane, aryl, a water soluble unit, or a linked polymer chain, or linked inorganic support; and
- C) R² is either R, H, or a symmetrical bidentate structure having the following formula:



wherein $\boxed{\text{BRIDGE}}$ is

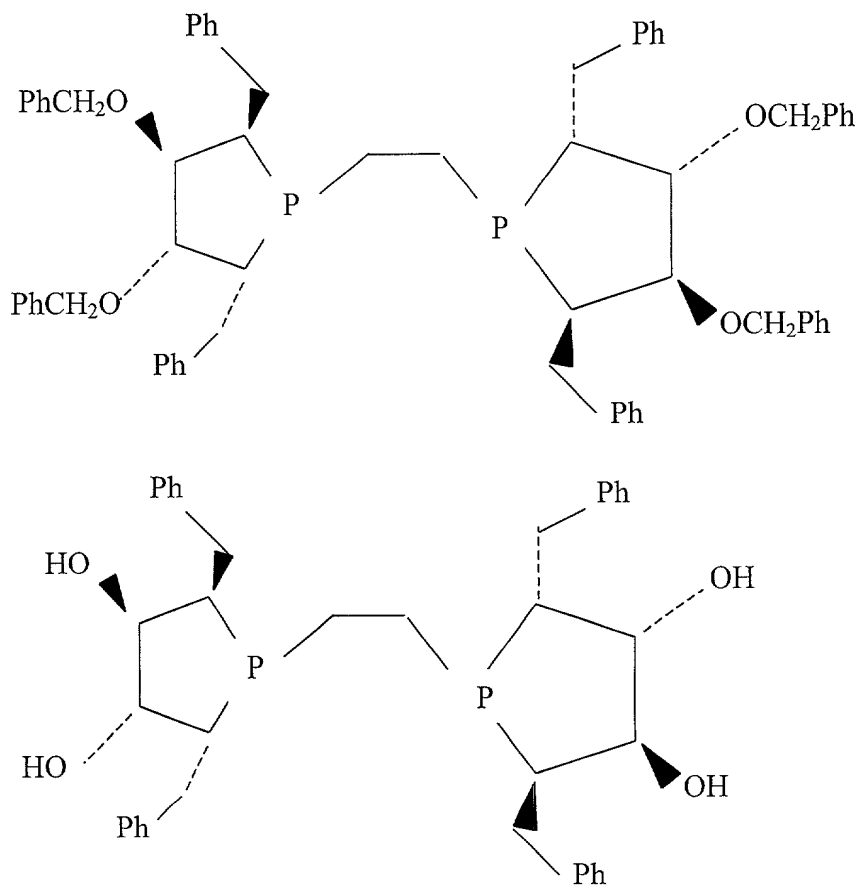
- i) $-(\text{CH}_2)_n-$ where n is an integer from 1 to 8; or
- ii) $-(\text{CH}_2)_n \text{X} (\text{CH}_2)_m-$ where n and m are the same or different integers from 1 to 8, and X is O, S, NR⁴, PR⁴, AsR⁴, SbR⁴, divalent aryl, divalent fused aryl, divalent 5-membered heterocyclic ring, or divalent fused heterocyclic ring, where R⁴ is C¹-C⁸ alkyl, aryl, substituted aryl, or substituted alkyl; or
- iii) 1, 2-divalent phenyl, 2, 2'-divalent 1, 1'-biphenyl, 2,2'-divalent, 1,1'-binaphthyl, or ferrocene, each of which may be substituted independently with C₁ – C₈ alkyl or aryl, F, Cl, Br, I, COOR⁵, SO₃R⁵, PO₃R⁵₂, OR⁵, SR⁵, NR⁵₂, PR⁵₂, AsR⁵₂, SbR⁵₂, nitro, vinyl, substituted vinyl, alkynyl wherein R⁵ is H, C₁-C₈ alkyl, substituted C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ perfluoroalkyl, aryl or substituted aryl; and

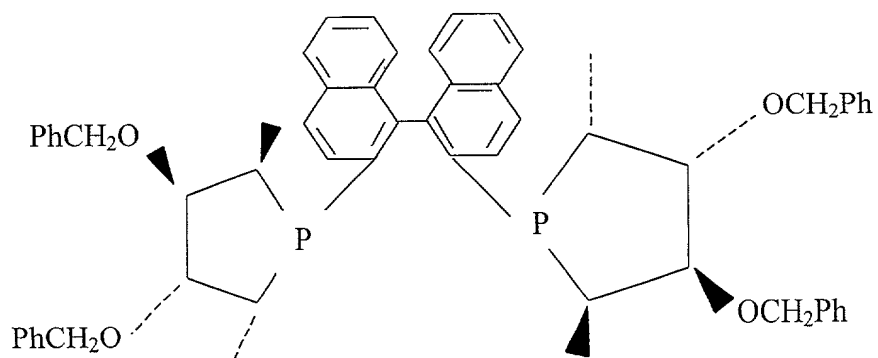
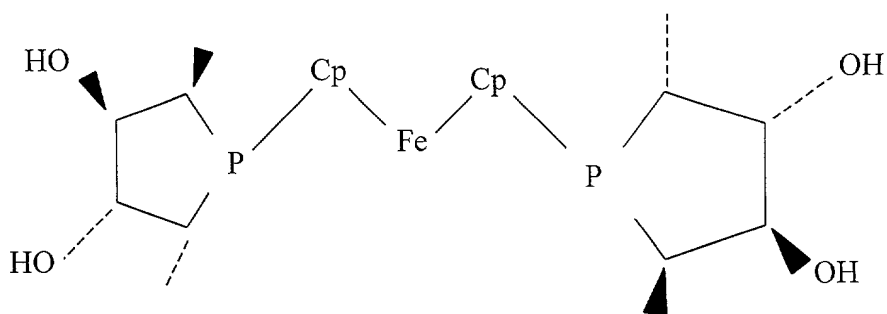
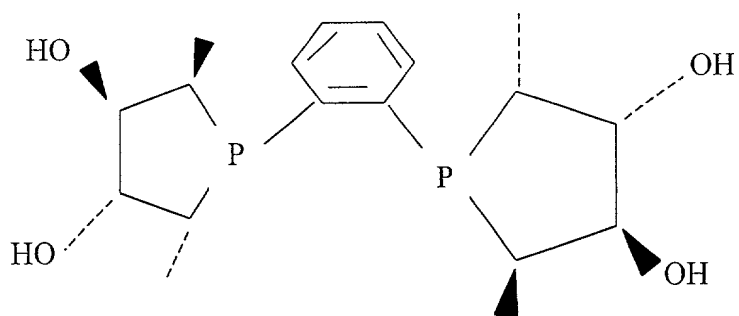
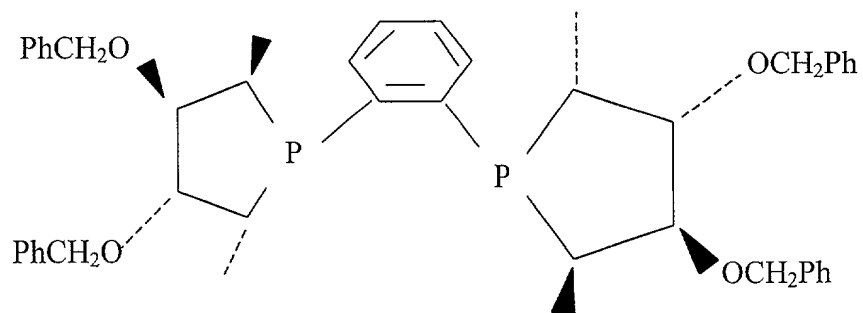
wherein Z is a compound selected from the group of compounds having the following formula:

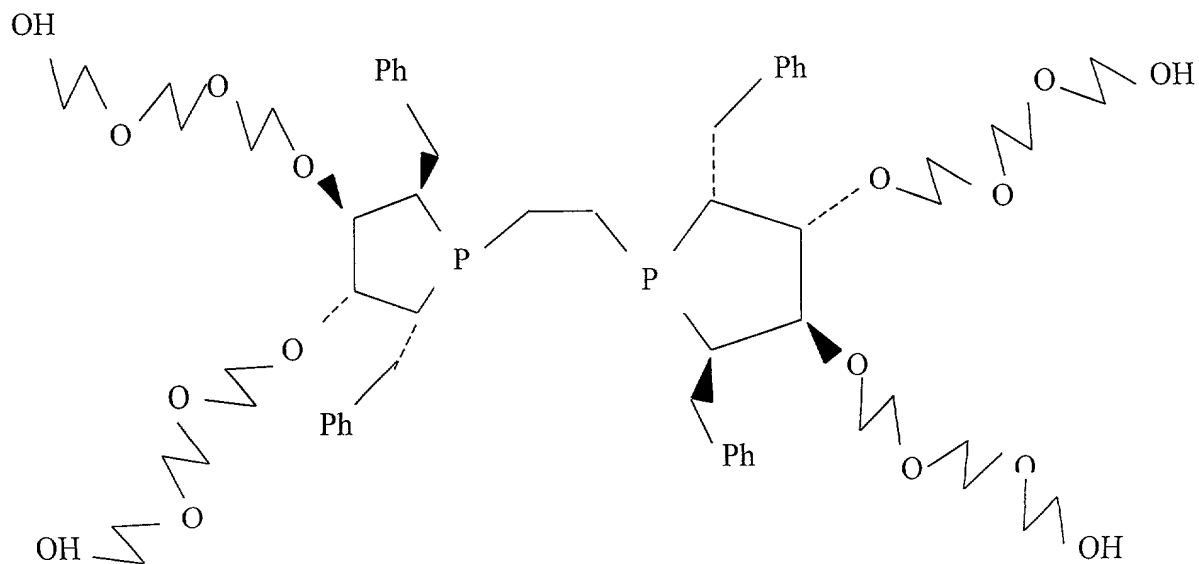
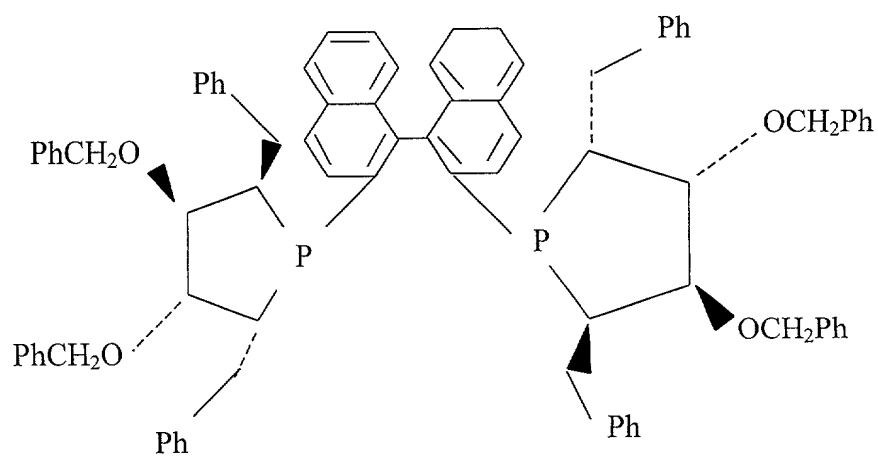
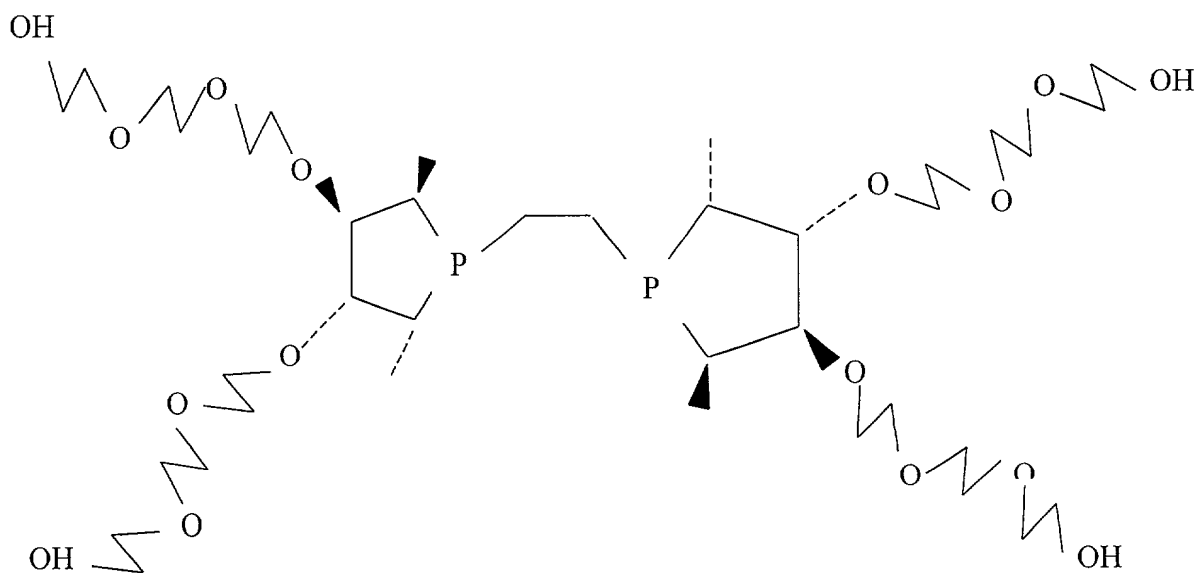


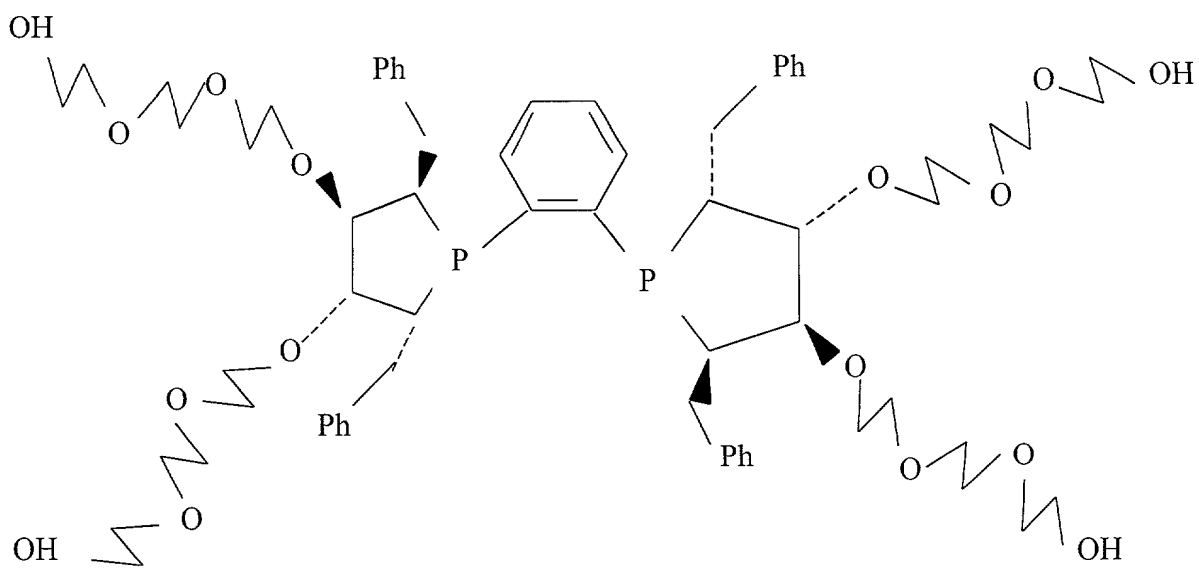
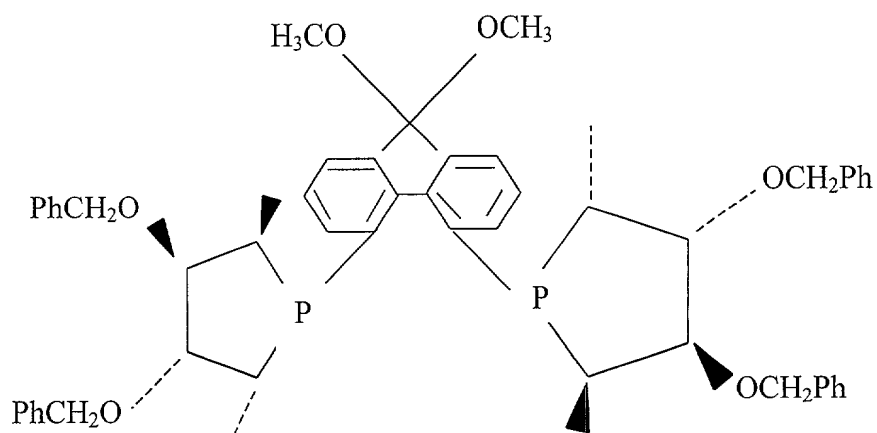
18. A compound according to claim 17 wherein R is methyl, ethyl, or benzyl; R¹ is hydrogen or benzyl; and the BRIDGE of R² is:-(CH₂)_n- where n is an integer ranging from 1 to 3; 1,2- divalent phenyl, 2,2'- divalent 1,1' biphenyl, 2,2'-divalent 1,2' binaphthyl, or ferrocene, each of which may be substituted with C₁-C₃ alkyl or OR⁵, wherein R⁵ is methyl or ethyl.

19. A compound according to claim 18 selected from the following formulas:

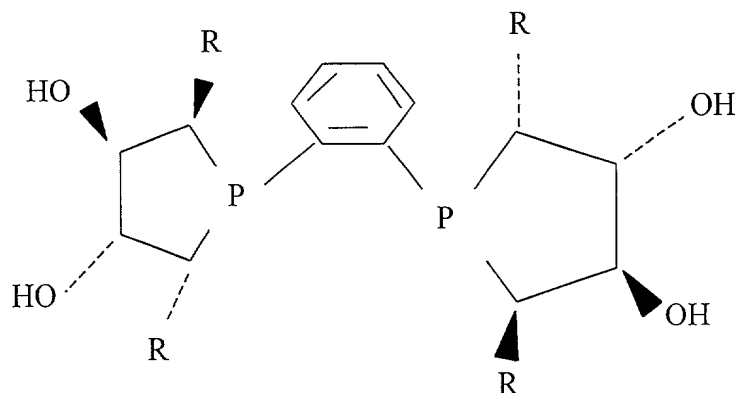




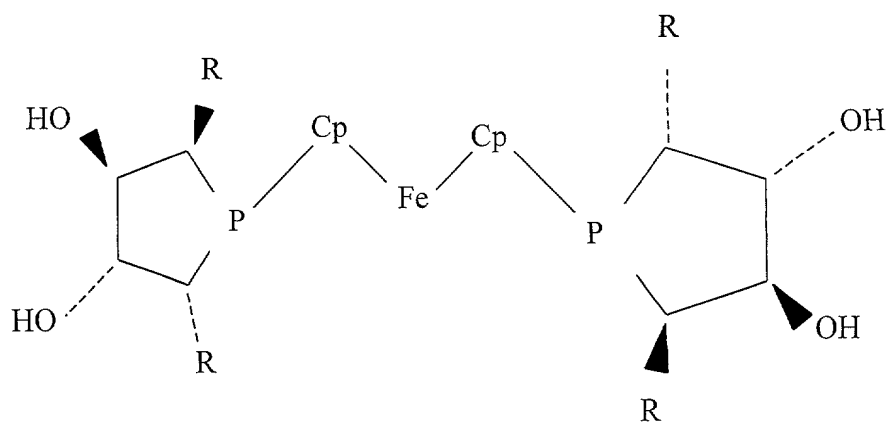




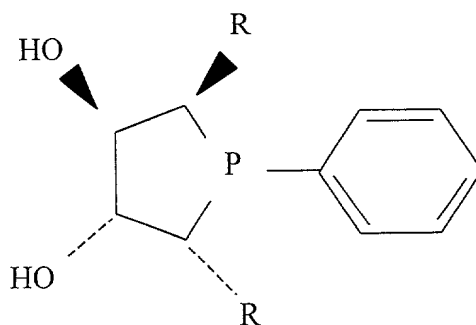
20. A compound according to claim 17 selected from the group of compounds of the following formula wherein R is methyl or ethyl:



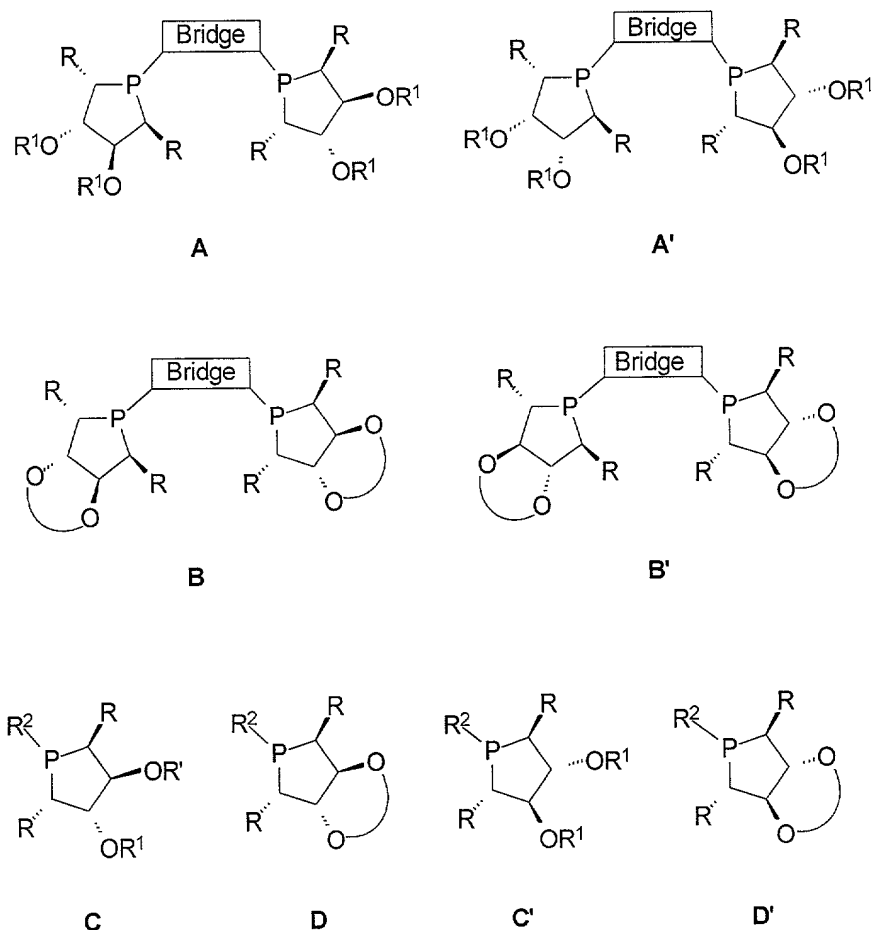
21. A compound according to claim 17 selected from the group of compounds of the following formula and their corresponding enantiomers wherein R is either methyl or ethyl:



22. A compound according to claim 17 selected from the group of compounds of the following formula wherein R is either methyl or ethyl:



23. A catalyst comprising a compound in the form of a complex with a transition metal wherein said compound is selected from compounds represented by the formula:



24. A catalyst according to claim 23, wherein the transition metal is rhodium, iridium, ruthenium, nickel, or palladium.

25. A catalyst according to claim 24, wherein said compound is a complex with a compound selected from the group consisting of: $\text{Pd}_2(\text{DBA})_3$, $\text{Pd}(\text{OAc})_2$;

$[\text{Rh}(\text{COD})\text{Cl}]_2$, $[\text{Rh}(\text{COD})_2]\text{X}$, $\text{Rh}(\text{acac})(\text{CO})_2$, $\text{RuCl}_2(\text{COD})$, $\text{Ru}(\text{COD})(\text{methylallyl})_2$, $\text{Ru}(\text{Ar})\text{Cl}_2$, wherein Ar is an aryl group, unsubstituted or substituted with an alkyl group; $[\text{Ir}(\text{COD})\text{Cl}]_2$, $[\text{Ir}(\text{COD})_2]\text{X}$; and $\text{Ni}(\text{allyl})\text{X}$; wherein X is a counterion.

26. A catalyst according to claim 25, wherein X is selected from the group consisting of: F^- , Cl^- , Br^- , I^- , BF_4^- , ClO_4^- , SbF_6^- , CF_3SO_3^- , and PF_6^- .

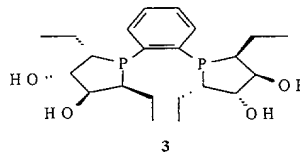
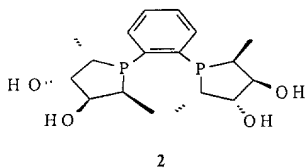
27. A catalyst according to claim 26 wherein X is PF_6^- .

28. A catalyst according to claim 24 wherein the transition metal is Ru or Rh.

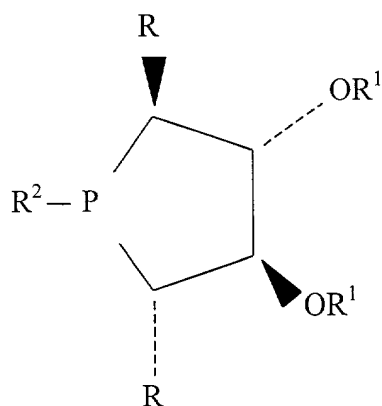
29. A catalyst according to claim 28 wherein the transition metal is Rh.

30. A catalyst according to claim 23, wherein the catalyst comprises: $\text{Ru}(\text{RCOO})_2(\text{diphosphine})$, $\text{RuX}_2(\text{diphosphine})$, $\text{Ru}(\text{methylallyl})_2(\text{diphosphine})$, $\text{Ru}(\text{aryl group})\text{X}_2(\text{diphosphine})$, $\text{Rh}(\text{RCOO})_2(\text{diphosphine})$, $\text{RhX}_2(\text{diphosphine})$, $\text{Rh}(\text{methylallyl})_2$ diphosphine, or $\text{Rh}(\text{aryl group})\text{X}_2$ (diphosphine) and X is halogen.

31. A catalyst according to claim 23 for asymmetric hydrogenation of a ketone, imine, or olefin, comprising: a complex of compounds **2** or **3** with a Rh compound selected from the group consisting of: $[\text{Rh}(\text{COD})\text{Cl}]_2$ and $[\text{Rh}(\text{COD})_2]\text{X}$, wherein X is selected from the group consisting of: BF_4^- , ClO_4^- , SbF_6^- , CF_3SO_3^- .



32. A catalyst according to claim 23 comprising a transition metal complex of a compound of the following formula or its enantiomer:



wherein:

(A) R is each C₁-C₈ alkyl, C₁-C₈ alkyl aryl; aryl C₁-C₈ alkyl, aryl, each of which may be substituted with carboxylic acid, alkoxy, hydroxy, C₁-C₈ alkylthio, thiol, dialkylamino, or diphenylphosphino, or chiral oxazoline; and

(B) R¹ is each H, C₁-C₈ alkyl, silane, aryl, a water soluble unit, or a linked polymer chain or linked inorganic support; and

(C) R² is either R, H, or a symmetrical bidentate structure having the formula

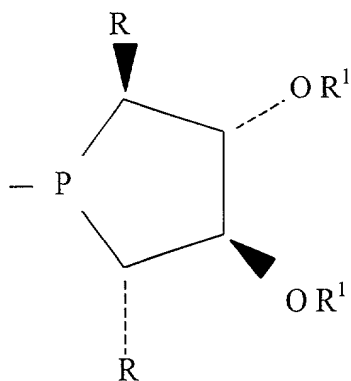


wherein $\boxed{\text{BRIDGE}}$ is

- (i) $-(\text{CH}_2)_n-$ where n is an integer from 1 to 8; or
- (ii) $-(\text{CH}_2)_n \text{X} (\text{CH}_2)_m-$ where n and m are the same or different integers from 1 to 8, and X is O, S, NR⁴, PR⁴,

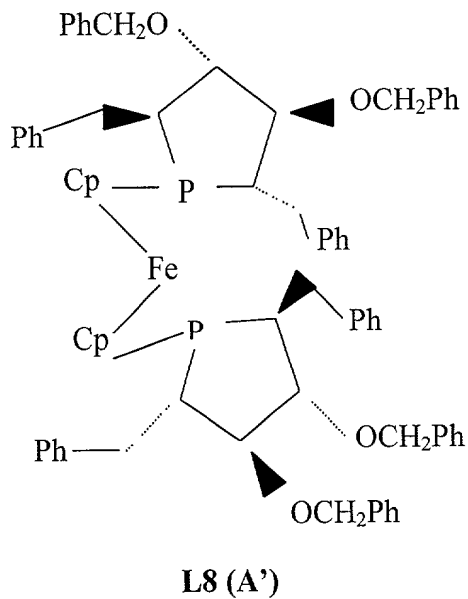
AsR⁴, SbR⁴, divalent aryl, divalent fused aryl, divalent 5-membered heterocyclic ring, or divalent fused heterocyclic ring, where R⁴ is C¹-C⁸ alkyl, aryl, substituted aryl, or substituted C₁-C₈ alkyl; or
(iii) 1, 2-divalent phenyl, 2, 2'-divalent 1, 1'-biphenyl, 2,2'-divalent, 1,1' binaphthyl, or ferrocene, each of which may be substituted independently with C₁ - C₈ alkyl or aryl, F, Cl, Br, I, COOR⁵, SO₃R⁵, PO₃R⁵₂, OR⁵, SR⁵, NR⁵₂, PR⁵₂, AsR⁵₂, SbR⁵₂, nitro, vinyl, substituted vinyl, alkynyl wherein R⁵ is H, C₁-C₈ alkyl, substituted C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ perfluoroalkyl, aryl or substituted aryl; and

wherein Z is a compound selected from the group of compounds having the following formula and their corresponding enantiomers:

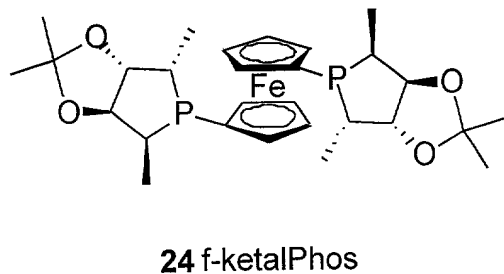


33. A catalyst according to claim 23, wherein each R¹ is independently selected from the group consisting of: methyl and ethyl groups.

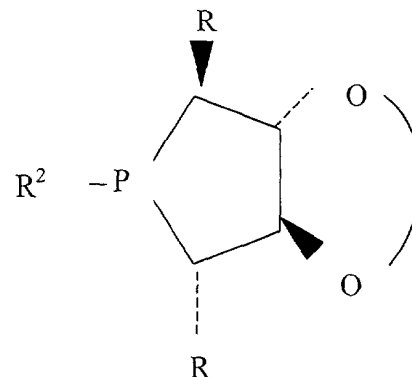
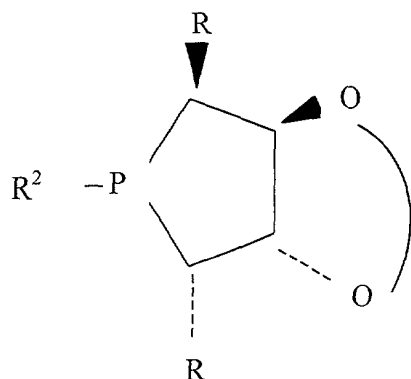
34. A catalyst according to claim 23, wherein the transition metal complex is derived from a compound of the following formula or its enantiomer:




35. A catalyst according to claim 23, wherein the transition metal complex is derived from a compound of the following formula or its enantiomer:



36. A catalyst according to claim 23 comprising a transition metal complex of a compound of the following formula or its enantiomer:



wherein

- A) R is C₁-C₈ alkyl, C₁-C₈ alkyl aryl, aryl C₁-C₈ alkyl, aryl, each of which may be substituted with carboxylic acid, alkoxy, hydroxy, alkylthio, thiol, dialkylamino, diphenylphosphino or chiral oxazoline; and
- B) the ring component  represents a protected diol, a crown ether linkage, -O-C₁-C₈ alkyl-O- wherein the alkyl group is linked to a polymer, -O-(CH₂CH₂)_n-O- wherein n is an integer ranging from 1 to 8 and the methylene groups are optionally substituted by C₁-C₈ alkyl, or O-W-O, where W is BR⁹, POR⁹, PO (OR⁹), SO₂, CO, or Si(R⁹)₂;

where R⁹ is C₁-C₈ alkyl, aryl, C₁-C₈ alkyl aryl, or aryl C₁-C₈ alkyl, alkoxy, hydroxy, alkylthio, thio, alkylamino, dialkylamino; and

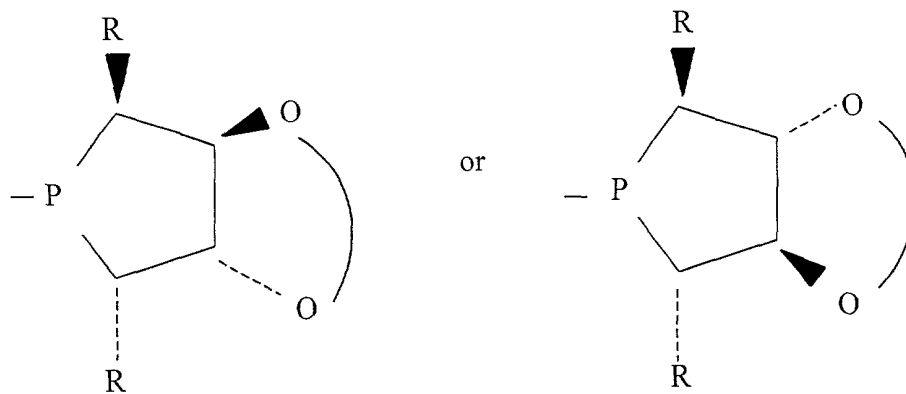
- C) R² is either R, H, phenyl or a symmetrical bidentate structure having the formula



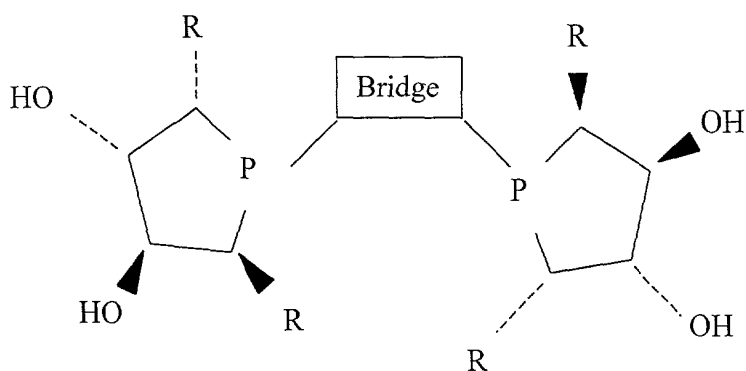
wherein $\boxed{\text{BRIDGE}}$ is

- i) $-(CH_2)_n-$ where n is an integer from 1 to 8; or
- ii) $-(CH_2)_n X (CH_2)_m-$ where n and m are the same or different integers from 1 to 8, and X is O, S, NR^4 , PR^4 , AsR^4 , SbR^4 , divalent aryl, divalent fused aryl, divalent 5-membered heterocyclic ring, or divalent fused heterocyclic ring, where R^4 is C^1 - C^8 alkyl, aryl, substituted aryl, or substituted alkyl; or
- iii) 1, 2-divalent phenyl, 2, 2'-divalent 1, 1'-biphenyl, 2, 2'-divalent, 1, 1' binaphthyl, or ferrocene, each of which may be substituted independently with $C_1 - C_8$ alkyl or aryl, F, Cl, Br, I, $COOR^5$, SO_3R^5 , $PO_3R^5_2$, OR^5 , SR^5 , NR^5_2 , PR^5_2 , AsR^5_2 , SbR^5_2 , nitro, vinyl, substituted vinyl, alkynyl wherein R^5 is H, C_1 - C_8 alkyl, substituted C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 perfluoroalkyl, aryl or substituted aryl; and

wherein Z is a compound selected from the group of compounds having the following formulas and their corresponding enantiomers:



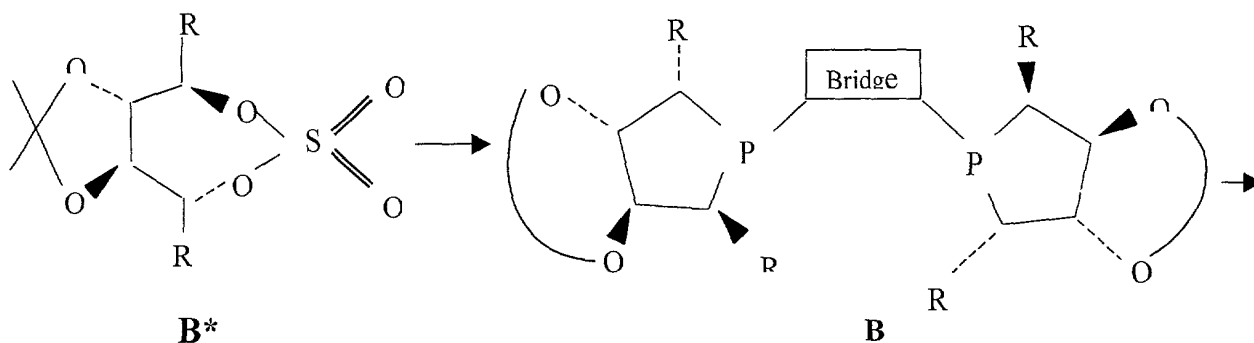
37. A process for preparing a compound of formula A, represented by the formula:



A

said process comprising:

reacting a compound of formula B* with a phosphine to form compound B:



and thereafter

reacting compound B with an acid to form compound A;

wherein the phosphine is $\text{H}_2\text{P}-\text{Bridge}-\text{PH}_2$;

A) R is aryl, $\text{C}_1\text{-C}_8$ alkyl, $\text{C}_1\text{-C}_8$ alkyl aryl, or aryl $\text{C}_1\text{-C}_8$ alkyl, which may be substituted with carboxylic acid, alkoxy, hydroxy, $\text{C}_1\text{-C}_8$ alkylthio, thiol, dialkylamino, diphenylphosphino, or chiral oxazolino groups;

B) the ring component O O represents a protected diol, a crown ether linkage, or

-O-(CH₂CH₂)_n-O- wherein n is an integer ranging from 1 to 8 and the methylene groups are optionally substituted by alkyl or linked to a polymer; and

C) Bridge may be:

-(CH₂)_n- where n is an integer ranging from 1 to 8;

-(CH₂)_n-X-(CH₂)_m- wherein n, m are each integers, the same or different, ranging from 1 to 8; or

1,2-divalent phenyl, 2,2'-divalent 1,1' biphenyl or 2,2'-divalent 1,2'binaphthyl or ferrocene, each of which may be substituted with aryl or substituted aryl, or alkyl having 1-8 carbon atoms, heteroatom groups such as F, Cl, Br, I, COOR⁵, SO₃R⁵, PO₃R⁵₂, OR⁵, SR⁵, NR⁵₂, PR⁵₂, AsR⁵₂, or SbR⁵₂,

wherein the substitution on 1,2-divalent phenyl, the ferrocene or biaryl bridge can be independently halogen, C₁-C₈ alkyl, alkoxyl, aryl, aryloxy, nitro, amino, vinyl, substituted vinyl, alkynyl, or sulfonic acids; and R⁵ is hydrogen, C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, or C₁-C₈ perfluoro, aryl; substituted aryl; aryl C₁-C₈ alkyl; ring-substituted arylalkyl; or CR³₂(CR³₂)_qX(CR³₂)_pR¹ wherein q and p are integers, the same or different, ranging from 1 to 8; X is O, S, NR⁴, PR⁴, AsR⁴, SbR⁴, divalent aryl, divalent fused aryl, divalent 5-membered ring heterocyclic group, or divalent fused heterocyclic group, wherein R³ and R⁴ are aryl, C₁-C₈ alkyl, substituted aryl and substituted alkyl groups.

38. A process according to claim 37 wherein:

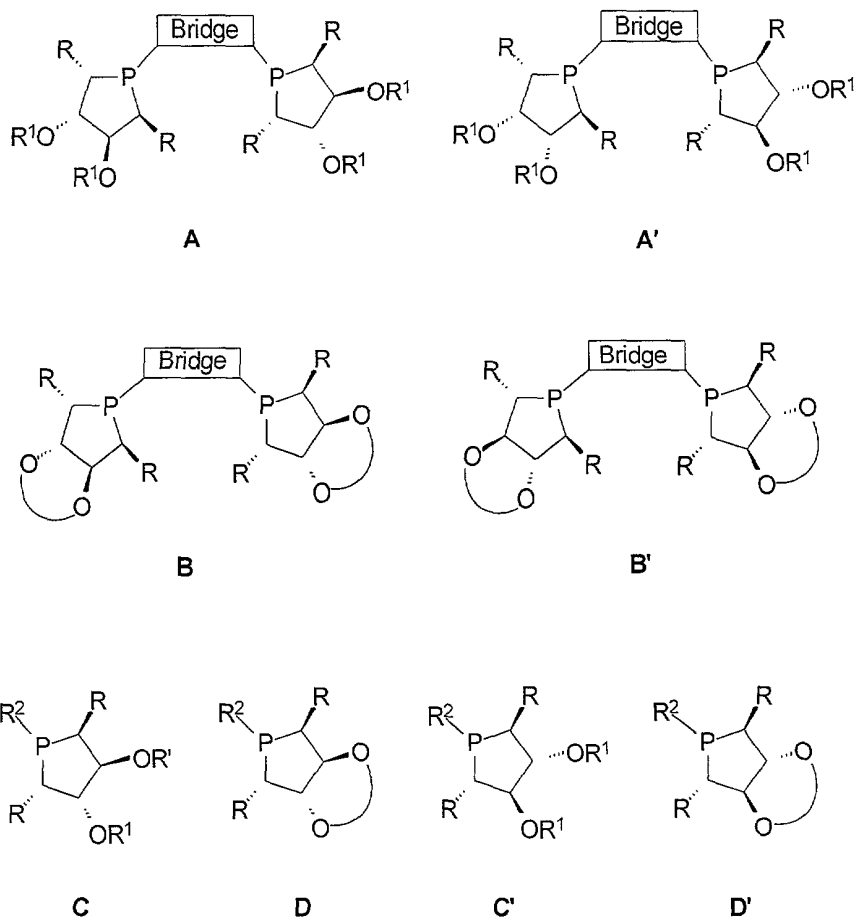
R is C₁-C₄ alkyl;

the ring component $\widehat{\text{O O}}$ represents a protected diol; and Bridge is unsubstituted or substituted 1,2-divalent phenyl.

39. A process according to claim 38 wherein R is methyl or ethyl, the ring component $\widehat{\text{O O}}$ is -O-C(CH₃)₂-O- and Bridge is unsubstituted 1,2-divalent phenyl.

40. A process comprising subjecting a substrate to an asymmetric reaction in the presence of a catalyst comprising a chiral ligand represented by the formula A,

A', B, B', C, C', D, or D', or the corresponding enantiomer:



wherein:

- R and R² are independently aryl, alkyl, alkyl aryl, aryl alkyl, or chiral oxazolono which may be substituted with carboxylic acid, alkoxy, hydroxy, alkylthio, thiol, dialkylamino, or diphenylphosphino groups;
- R¹ can be H, alkyl, silane, aryl, a water soluble unit, or a linked polymer chain or inorganic support;
- the ring component $\text{O}-\text{O}$ represents a protected diol, a crown ether linkage, -O-alkyl-O- wherein the alkyl group is linked to a polymer, or -O-(CH₂CH₂-O)_n- wherein n is an integer ranging from 1 to 8 and the methylene groups are optionally substituted by C1-C8 alkyl; and

d) Bridge may be:

$-(CH_2)_n-$ where n is an integer ranging from 1 to 8;

$-(CH_2)_nX(CH_2)_m-$ wherein n and m are each integers, the same or different, ranging from 1 to 8, and X is O, S, NR^4 , PR^4 , AsR^4 , SbR^4 , divalent aryl, divalent fused aryl, divalent 5-membered ring heterocyclic group, or divalent fused heterocyclic group, wherein R^4 is aryl, alkyl, substituted aryl, or substituted alkyl; or

1,2-divalent phenyl, 2,2'-divalent 1,1'-biphenyl or 2,2'-divalent 1,2'-binaphthyl or ferrocene, each of which may be substituted with aryl, C1-C8 alkyl, F, Cl, Br, I, $COOR^5$, SO_3R^5 , $PO_3R^5_2$, OR^5 , SR^5 , NR^5_2 , PR^5_2 , AsR^5_2 , or SbR^5_2 , wherein:

the substitution on 1,2-divalent phenyl, the ferrocene or biaryl bridge can be independently halogen, alkyl, alkoxyl, aryl, aryloxy, nitro, amino, vinyl, substituted vinyl, alkynyl, or sulfonic acids; and

R^5 is hydrogen, C1-C8 alkyl, C1-C8 fluoroalkyl, or C1-C8 perfluoroalkyl, aryl; substituted aryl; arylalkyl; ring-substituted arylalkyl; or $CR^3_2(CR^3_2)_qX(CR^3_2)_pR^1$ wherein q and p are integers, the same or different, ranging from 1 to 8; R^3 is aryl, alkyl, substituted aryl, or substituted alkyl; and X is as defined above;

wherein said asymmetric reaction is a hydrogenation, hydride transfer, hydrosilylation, hydroboration, hydrovinylation, olefin metathesis, hydroformylation, hydrocarboxylation, allylic alkylation, cyclopropanation, Diels-Alder, Aldol, Heck [m + n] cycloaddition, or Michael addition reaction.

41. A process according to claim 40, wherein said asymmetric reaction comprises asymmetric hydrogenation of a ketone, imine, enamide, or olefin.

42. A process according to claim 40, wherein said asymmetric reaction comprises Rh(I)-catalyzed hydrogenation of a dehydroamino acid or an ester thereof.